

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A peptide composition comprising an isolated peptide immobilized on a solid phase, said peptide immunoreactive with having at least one epitope capable of binding antibodies to a native protein comprising the epitope(s),

wherein the peptide comprises an amino acid sequence of six to 50 amino acids, and the sequence comprises two Cys residues which are separated from each other by at least ~~about~~ two but fewer than twenty non-Cys amino acid residues and wherein thiol groups of the Cys residues are reversibly protected from oxidation by a chemically reversible means, and

wherein a substantial portion of the composition comprising the immobilized peptide comprises peptide having an intramolecular disulfide bond between the two Cys residues.

2. (Currently amended) The peptide composition of claim 1, wherein the Cys residues of the peptide are protected from oxidation by ethylcarbamoyl, acetamidomethyl, 3-nitro-2-pyridinesulfinyl or diphenyl-4-pyridylmethyl.

3. (Currently amended) The peptide composition of claim 2, wherein the Cys residues of the peptide are protected from oxidation by ethylcarbamoyl.

4. (Currently amended) The peptide composition of claim 1, further comprising a third Cys residue at the N-terminus of the peptide, wherein the third Cys residue which is not protected from oxidation.

5. (Currently amended) The peptide composition of claim 4, wherein the N-terminal amino acids N-terminus sequence of the peptide is comprise Cys-Gly-Gly.

6. (Currently amended) The peptide composition of claim 4, wherein the C-terminus amino acid at the C-terminus of the peptide is amidated.

7. (Currently amended) The peptide composition of claim 1, wherein the Cys residues are separated from each other by about four to six non-Cys residues.

8. (Currently amended) The peptide composition of claim 1 which wherein the peptide is immunoreactive with capable of binding antibodies to a retroviral transmembrane protein.

9. (Currently amended) The peptide composition of claim 8, wherein the retroviral protein is HIV-1 gp41 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Arg-Ile-Leu-Ala-Val-Glu-Arg-Tyr-Leu-Lys-Asp-Gln-Gln-Leu-Leu-Gly-Ile-Trp-Gly-Cys-Ser-Gly-Lys-Leu-Ile-Cys (SEQ ID NO:1).

10. (Currently amended) The peptide composition of claim 9, wherein the N-terminus of the peptide comprises amino acids added to enhance immunospecific reactivity specific binding of the antibodies to the protein comprising the epitope(s), wherein at least one of said additional amino acids is a third Cys residue not protected from oxidation.

11. (Currently amended) The peptide composition of claim 10, wherein the third Cys residue not protected from oxidation is the N-terminal residue of the peptide.

12. (Currently amended) The peptide composition of claim 11, wherein the N-terminus amino acid sequence of the peptide is Cys-Gly-Gly.

13. (Currently amended) The peptide composition of claim 11, wherein the C-terminus amino acid residue at the C-terminus of the peptide is amidated.

14. (Withdrawn) The peptide of claim 8, wherein the retroviral protein is HIV-2 gp36 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Arg-Val-Thr-Ala-Ile-Glu-Lys-Tyr-Leu-Gln-Asp-Gln-Ala-Arg-Leu-Asn-Ser-Trp-Gly-Cys-Ala-Phe-Arg-Gln-Val-Cys (SEQ ID NO:2).

15. (Withdrawn) The peptide of claim 14, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

16. (Withdrawn) The peptide of claim 15, wherein the Cys not protected from oxidation is the N-terminal residue.

17. (Withdrawn) The peptide of claim 16, wherein the N-terminus sequence is Cys-Gly-Gly.

18. (Withdrawn) The peptide of claim 16, wherein the C-terminus amino acid is amidated.

19. (Withdrawn) The peptide of claim 8, wherein the retroviral transmembrane protein is HTLV-I gp21 and the peptide comprises at least about seven contiguous amino acids within the following sequence:

Gln-Asn-Arg-Arg-Gly-Leu-Asp-Leu-Leu-Phe-Trp-Glu-Gln-Gly-Gly-Leu-Cys-Lys-Ala-Leu-Gln-Glu-Gln-Cys (SEQ ID NO:4).

20. (Withdrawn) The peptide of claim 19, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

21. (Withdrawn) The peptide of claim 20, wherein the Cys not protected from oxidation is the N-terminal residue.

22. (Withdrawn) The peptide of claim 21, wherein the N-terminus sequence is Cys-Gly-Gly.

23. (Withdrawn) The peptide of claim 21, wherein the C-terminus amino acid is amidated.

24. (Withdrawn) The peptide of claim 8, wherein the retroviral protein is HTLV-II gp21 and the peptide comprises at least seven contiguous amino acids within the following sequence:

Gln-Asn-Arg-Arg-Gly-Leu-Asp-Leu-Leu-Phe-Trp-Glu-Gln-Gly-Gly-Leu-Cys-Lys-Ala-Ile-Gln-Glu-Gln-Cys (SEQ ID NO:5).

25. (Withdrawn) The peptide of claim 24, wherein the N-terminus comprises amino acids added to enhance immunospecific reactivity, wherein at least one of said additional amino acids is a Cys residue not protected from oxidation.

26. (Withdrawn) The peptide of claim 25, wherein the Cys not protected from oxidation is the N-terminal residue.

27. (Withdrawn) The peptide of claim 26, wherein the N-terminus sequence is Cys-Gly-Gly.

28. (Withdrawn) The peptide of claim 26, wherein the C-terminus amino acid is amidated.

29.- 47. (Canceled)